

5. The old feather now completely changed. May. Same locality.
6. A new feather coming in: being a good example of the fresh feather keeping down its tints to suit and be even with the old feather, which is still undergoing the change exhibited in No. 3. Taken from the same bird as No. 3 feather.
7. A new feather coming in full richness, assimilating itself to a fully-changed old feather. Taken from the same bird as No. 4 feather.

Method No. III.

SANDERLING, ♂ (*Calidris arenaria*).

Feathers from the back of the neck, showing the change of colour and form which takes place during the assumption of the summer dress.

Examples of a bird changing from winter into summer plumage without moult, the alteration in the dress being practically due to changes of colour of the same feather.

8. November or March feather. Crosby, Lancashire.
9. Taken from a bird killed in the middle of April. The dark markings now appearing.
10. Taken from a bird killed at Shoreham in the middle of May. Change complete, showing white tip.
11. Further change, showing white colours still moving towards extremity. (Dress in which the bird might breed.) From a bird killed at Shoreham, Sussex, June.
12. The feather has now terminated its transition, and will in a few days be cast for a new full winter one, same as No. 8. The darker markings have further advanced to the extremity, and a certain amount of wear and tear is plainly visible. In this case the tips are worn.

XLI.—On the Birds of the Philippine Islands.—Part VII.*
The Highlands of Mindoro. By W. R. OGILVIE GRANT.
With Field-Notes by JOHN WHITEHEAD.

(Plate XI.)

A CONSIDERABLE time has now elapsed since the readers of 'The Ibis' have heard anything of Mr. Whitehead's doings in the Philippine Islands. I need hardly say that this indefatigable collector has not been idle during the last year, but through a lamentable accident the entire results of four

* For Part I. see *Ibis*, 1894, pp. 406-411; Part II. *ibid.* pp. 501-522; Part III. *Ibis*, 1895, pp. 106-117; Part IV. *ibid.* pp. 249-267; Part V. *ibid.* pp. 433-472; Part VI. *Ibis*, 1896, pp. 101-128.

months' work in the island of Samar have apparently been lost, owing to the destruction of the s.s. 'Weiland' by fire off Singapore.

Steamers running directly between the Philippine Islands and London are comparatively few and far between, and the 'Weiland,' belonging to a German firm of merchants, appears to have been a somewhat cranky vessel, to which such a valuable collection should not have been consigned; but against this risk had to be considered the probable deterioration of specimens lying packed for months at Manila, and exposed to danger from heat, damp, and insects. The 'Weiland' had a cargo of hemp, and caught fire while lying off Singapore, where she was undergoing some repairs, her engines having broken down. Most of the cargo having been removed, the ship was scuttled to put out the fire. As no news has, up to the present time, been heard of the case containing this collection, it seems probable that it was really destroyed in the fire; but as a quantity of the cargo was certainly saved, and the packing-case in question was one of the last put on board before the 'Weiland' sailed from Manila, there seems to be still some faint hope that it has been merely mislaid at Singapore and may still find its way to London.

In a letter written from Manila on the 4th October, 1895, Mr. Whitehead informed me of his return from Samar in the middle of September, the wet season being then at its height and most of the birds in full moult. The collection made there contained examples of about 100 species, and from the descriptions given some of them must, no doubt, have been new. His letters contain interesting remarks about the birds collected and notes on the colours of the soft parts in almost every species, which makes the loss of the collection the more to be deplored, as these particulars are now rendered practically useless. At the present time Mr. Whitehead is once more in the island of Samar, having returned there towards the end of May of the present year with a view to making good the lost collection, though it is likely enough that some of the species previously obtained may not be met

with again. On the 19th October, 1895, he left Manila with a staff of seven collectors for the island of Mindoro, with the object of exploring the well-wooded highlands of this comparatively little-known island, and returned to Manila on the 16th February, 1896, after four months' absence. The results of this expedition are, Mr. Whitehead considers, by no means satisfactory, for at the time of his visit the wet season was at its height, and, owing to the almost continuous rains, collecting could only be carried on under the greatest difficulties. He tells us that during his stay on Mindoro seventy days out of a hundred were very wet, twenty dull and drizzling, while only ten were comparatively bright and fine ; so it can easily be understood that he was unable to do nearly as much as he had hoped. Bird-life was comparatively scarce, and there can be little doubt that the majority of species, at least, change their abode during the rainy season and seek more sheltered quarters.

Unfortunately he experienced great trouble with his collectors, all of whom suffered at one time or another from fever, and took every opportunity of misbehaving. One man robbed him of his money, while others, left at the foot of the mountain to make a lowland collection, did practically nothing during many weeks, and sold both gun-caps and powder to the natives.

Although the Mindoro collection, representing "four months' very hard work and slow starvation," is not large, all the skins are as perfect as those sent in previous consignments, and one of the novelties, an enormous Fruit-Pigeon, obtained at an elevation of between 5000 and 6000 feet, is certainly one of the finest and most remarkable birds that Mr. Whitehead has discovered during his travels.

On landing at Mindoro a guide was engaged as pilot to the high ground, but this worthy led the expedition by a wrong path, and after a long day's march in the usual deluge of rain, Mr. Whitehead found himself on the bank of a fine river surrounded by the most dense and magnificent forest, where he was forced to remain for ten days waiting for porters. It was here that the expedition was nearly wrecked,

the river coming down in a tremendous flood with very little warning. The camp had been pitched about 20 feet above the river, which at this part was about 200 yards wide, but in less than twelve hours, fortunately in daylight, the water was running from two to three feet deep like a mill-race through Mr. Whitehead's tent, while his men had to escape in canoes from another house lower down the river, where most of the less portable boxes had been left.

By great exertions all the baggage was saved. "I have," writes Mr. Whitehead, "seen a good deal of the tropics, but I never encountered such deluges, such incessant rain, or such thousands of leeches. The leeches quite crippled two of my men, and one of the two caught 'birri-birri,' so I sent him back to Manila. All the others had fever, but I got off with two mild attacks of dysentery. I was so reduced, from having nothing to eat but tinned foods and rice, that I became quite weak, losing most of my energy at times. In four months I had eaten only five pigeons, two parrots, and some few thrushes, and, with the exception of eggs, there was no other fresh food to be had." Such is life in the highlands of the Philippines.

By making friends with a chief of the true aborigines of Mindoro, the twenty-five porters required to carry the baggage to the mountains were at last obtained, and, after two days' march under continuous heavy rain, Mr. Whitehead and his men camped at an altitude of 4500 feet on Mount Dulangan, in the main range of Mindoro. This range of mountains is somewhat horseshoe-shaped. Mr. Whitehead continues :—"To cut a long story short, it rained all November, all December, and all January : one deluge began on the 11th of December, and was perhaps second only to that which floated Noah and his great zoological collection, for it continued until the 6th of January, 1896 ! But for all this I was in good health, the climate being cool, seldom over 60° F., and some nights only 52° F. In such weather it was hardly to be expected that we should do very much ; in my opinion birds migrate to other and drier situations during such seasons. Pittas certainly do, and perhaps most other species.

The west-coast range would be much drier in October to February during the north-east monsoon, but much more difficult to reach unless a special steamer were to be chartered. The mountain on the east side is perhaps over 8000 feet, but the ranges are mostly from 5000 to 6000 feet. I was guided by the natives to a part that attained nearly 6000 feet, but we could not reach the rest of the mountain from this position. The weather, as I have told you already, was too bad for anything. There is no open land in Mindoro, which is an island covered with dense forest, very different from Luzon, which is comparatively thinly wooded. The undergrowth is very dense, and without cutting paths impossible to get through. Between 4500 feet and nearly 6000 feet we only obtained 20 species of birds, though, no doubt, there were others we did not see."

Some idea of the difficulties under which the Mindoro collection of birds has been made may be gathered from reading the above, and it seems almost incredible that such perfect skins as those before me can have been prepared under such adverse circumstances. The gems of the present collection are the great Fruit-Pigeon (*Carpophaga mindorensis*), already mentioned, allied to the much smaller *C. radiata* from Celebes; and a beautiful new "Blackbird" (*Turdus mindorensis*) with the middle of the breast and belly pure white and the sides and flanks bright chestnut-red. There is also a new Hawk-Owl. A good many of the birds obtained are identical with those previously discovered by Mr. Whitehead in the highlands of Luzon, and a number of others peculiar to Mindoro have been already described by previous collectors. It seems curious that the Blackbird of Mindoro should be entirely different from that discovered in Luzon, when so much of the highland fauna of the two islands appears to be identical.

In addition to the bird-collection, a few small mammals, chiefly rats, were collected; some having been obtained in the neighbourhood of the camp at an elevation of 5000 feet. There is also a bat, which will probably prove to be very interesting, but Mr. Oldfield Thomas has not yet had time

to study this part of the collection. Very few insects were obtained during this trip, but Mr. Whitehead has sent home a fine collection of dried plants, which will be reported on in due course by Mr. Rendle, of the Botanical Department of the Natural History Museum.

1. *ELANUS HYPOLEUCUS*, Gould ; Sharpe, Cat. B. Brit. Mus. i. p. 338 (1874).

An adult example of the Black-shouldered Kite was obtained in the lowlands.

2. *SCOPS*, sp. inc.

The present collection contains an imperfect skin of a small Owl with long ear-tufts and partially naked tarsi, which, if not identical with *Scops longicornis* from Luzon, is very closely allied to that species ; both the type of *S. longicornis* and the second specimen subsequently obtained in the Lepanto district are males, whereas the bird from Mindoro is a female. Unfortunately it was shot by Mr. Whitehead's collector at such short range that one side of the breast was entirely blown away ; but Mr. Whitehead has managed to make the bird into a fairly good skin, and the different characteristics can be well seen. It differs from the Luzon specimens in the following particulars :—The hair-like feathers on each side of the mandible are considerably shorter, the longest bristles being less than an inch in length, while in *S. longicornis* they measure fully 1·2 ; the feathers on the forehead and above the eyes are almost uniform pale buff in the Mindoro bird, instead of white ; the ear-tufts are less developed, measuring only 1·2 ; the white ring across the back of the neck is merely indicated by a few paler feathers, otherwise the upper parts are very similar to the type of *S. longicornis* ; the ground-colour of the underparts—especially the middle of the breast and belly—is mostly buff, and almost entirely devoid of white, which is so conspicuous in *S. longicornis*. Total length 7·2 inches, wing 5·3, tail 2·5, tarsus 1·15.

This imperfect specimen most probably represents a distinct species, but more material is required to settle the point.

3. *Ninox mindorensis*, sp. n.

An adult female of this little Mindoro Hawk-Owl was obtained in the lowlands, and is nearly allied to *N. spilocephala*, Tweedd., from Mindanao and Basilan, resembling that species in having the top of the head and nape barred with buff. It may, however, be at once recognized by having the whole of the underparts, including the belly and flanks, tawny buff, transversely barred with brown, while in the female of *N. spilocephala*, though the breast is generally like that of the present species, the belly and flanks are always white, with longitudinal reddish-brown shaft-stripes. Total length 8.0 inches, wing 6.0, tail 3.0, tarsus 1.1.

I have of course carefully compared this species with Messrs. Bourns and Worcester's description of *N. spilonotus*, specimens of which were obtained in Mindoro, but the much smaller size of this bird serves to at once distinguish it.

4. *Ninox japonica* (Temm. & Schl.); Grant, Ibis, 1896, p. 111.

A male example of the Japanese Hawk-Owl was procured. It is a nearly typical example of *N. japonica*, much darker than the bird from Fuga Island, described in the last paper, the predominating colour of the underparts being reddish brown.

5. *Corvus pusillus*, Tweeddale, P. Z. S. 1878, p. 622.

Mr. Whitehead sends several examples of this small Philippine Raven from the lowlands of Mindoro. They are all in splendid freshly moulted plumage, the wings especially having a fine deep purplish gloss.

6. *Oriolus chinensis*, Linn.; Grant, Ibis, 1896, p. 111.

A female of the Chinese Oriole from the lowlands.

7. *Artamides mindorensis*, Steere, List of Birds & Mamm. Philippines, p. 14 (1890).

Both sexes of the Mindoro Cuckoo-Shrike are represented.

8. *Muscicapula luzoniensis*, Grant, Ibis, 1894, p. 505.

Mindoro examples of the Luzon Flycatcher are perfectly similar to those obtained in the highlands of Benguet and

Lepanto. By some accident, *M. luzoniensis* was omitted from the list of birds given from the highlands of the Province of Lepanto; several specimens were, however, obtained, and it should have appeared in the list before *M. westermanni* (see Ibis, 1895, p. 442).

9. *HYPOTHYMIS AZUREA* (Bodd.); Grant, Ibis, 1896, p. 111.

Three females of the Black-naped Flycatcher are perfectly similar in plumage to those obtained in Luzon, but at first sight they look somewhat different, for in all three Mindoro birds the shape of the bill has been artificially altered by lateral compression, and the culmen now appears to be rather high and vaulted.

10. *ZEOCEPHUS RUFUS* (G. R. Gray); Grant, Ibis, 1896, p. 112.

Adult and immature males of the Chestnut Flycatcher are quite similar to those from the north of Luzon. The tail of the adult male measures 5·6 inches.

11. *CRYPTOLOPHA NIGRORUM*, Moseley; Grant, Ibis, 1895, p. 443.

Several examples of this little Yellow Flycatcher are perfectly similar to typical examples from Negros, as well as to those previously obtained by Mr. Whitehead in various parts of Luzon.

12. *STOPAROLA NIGRIMENTALIS*, Grant, Ibis, 1895, p. 443.

This Black-chinned Flycatcher, one of the novelties discovered by Mr. Whitehead in the highlands of Benguet, was again obtained on Mount Dulangan.

13. *SIPHIA PHILIPPINENSIS* (Sharpe); Grant, Ibis, 1896, p. 112.

Both sexes of the Philippine Red-breasted Flycatcher were sent.

14. *PHYLLOSCOPUS BOREALIS* (Blasius); Grant, Ibis, 1895, p. 443, & 1896, p. 113.

An adult example of the Arctic Willow-Warbler was shot on the 10th of October.

15. *LOCUSTELLA OCHOTENSIS* (Midd.); Seeböhm, Cat. B. Brit. Mus. v. p. 113 (1881); Steere, List Birds & Mamm. Philippines, p. 20 (1890).

A pair of Middendorff's Grasshopper-Warbler were collected by Prof. Steere on the island of Marinduque on the 12th of May; so far as I am aware, this is the only other record of the occurrence of this species in the Philippine Islands. The present example, the sex of which was not ascertained, is evidently a bird of the year, the underparts being suffused with yellowish. It was shot in the month of January and is in full moult—the outer primary quills and outer tail-feathers of the old plumage being much worn, while the secondary quills and middle tail-feathers are quite fresh. This rare Warbler is said to breed in North-eastern Siberia and the Kurile Islands, passing through Japan on migration and wintering in the islands of the Malay Archipelago.

16. *TURDUS MINDORENSIS*, sp. n.

This extremely handsome Blackbird is perhaps most nearly allied to *Turdus layardi* from Viti Levu, Fiji Islands, but may be easily distinguished from that species by the following characters:—The middle of the lower breast and belly are pure white, only the sides and flanks being rich chestnut, and the whole of the upper parts from the mantle downwards are brownish black, contrasting strongly with the brownish-grey head and nape. This species is, of course, also nearly related to *T. seebohmi* and *T. whiteheadi*.

Adult male. Top and sides of the head and nape greyish brown, shading into brownish black on the rest of the upper parts and tail; chin whitish; throat and upper breast brownish grey, but considerably paler than the crown; sides of the lower breast and flanks rich chestnut; middle of the breast and belly pure white; under tail-coverts dark grey tinged with rufous and with wide white middles, widest towards the extremity.

Total length 9·0 inches, wing 4·25, tail 3·45, tarsus 1·2.

Adult female. Only differs from the male in having the

brownish-black upper parts washed with dark olive, most conspicuous on the rump and upper tail-coverts.

Total length 8·7 inches, wing 4·25, tail 3·25, tarsus 1·2.

In the *immature male* the upper parts resemble those of the female, but most or many of the feathers on the top of the head are brownish black and similar in colour to the back of the adult male.

In a slightly older example the head is mixed with the brownish-grey feathers of the adult plumage; in a younger bird the crown is uniform brownish black, and the feathers of the mantle have rufous shaft-stripes. Both these birds have the chest and upper breast mixed with rust-coloured feathers spotted with black at the extremity, and perfectly similar to those found in the young of the Common Black-bird (*T. merula*).

An *immature female* has the top of the head and nape warm dark brown, and the rest of the upper parts dark brown washed with olive, as in the adult female, but few of the feathers of the mantle and wing-coverts have narrow rufous shaft-stripes, and the throat and chest are mostly clad in the rust and black-spotted immature plumage. The nearly adult female differs only from the adult in having the crown blackish brown.

17. *Iole mindorensis*, Steere, List Birds & Mamm. Philip-pines, p. 19 (1890).

Iole schmackeri, Hartert, J. f. O. 1890, p. 155, & 1891, p. 202.

The Mindoro Streaked Bulbul appears to be a perfectly well characterized species, and a nice series of birds of both sexes was obtained between the months of November and January. Prof. Steere mentions that it may be distinguished from *I. philippensis* by its long beak, &c., but it is the *I. philippensis*, and not *I. mindorensis*, which has the longer bill.

18. *BRACHYPTERYX POLIOGYNA*, Grant, Ibis, 1895, p. 446, pl. xii. fig. 1 [♀].

The Luzon Shortwing was again met with in the high-

lands of Mindoro. Several males, but only one female specimen, were obtained, and the latter is not adult, most of the wing-coverts being edged with rust-colour, while the forehead and crown are more rufous than in the adult bird, and the throat and cheeks more rust-coloured. There can, however, be no doubt that the Mindoro bird is identical with the Shortwing obtained in the Lepanto highlands of Luzon, and that the slight differences are only due to age.

19. *MEGALURUS RUFICEPS* (Tweedd.) ; Grant, *Ibis*, 1895, p. 448.

A male of the Rufous-headed Marsh-Warbler was collected on the 21st November, this species being now recorded for the first time from Mindoro.

20. *PARUS ELEGANS*, Less. ; Grant, *Ibis*, 1895, p. 449.

This Tit appears to be fairly common in Mindoro.

21. *HYLOTERPE ALBIVENTRIS*, Grant, *Ibis*, 1894, p. 511, & 1895, p. 449.

Mr. Whitehead has again obtained several examples of the White-bellied Thickhead, which he first discovered in the highlands of Benguet.

22. *LANIUS VALIDIROSTRIS*, Grant, *Ibis*, 1894, p. 512, & 1895, p. 450.

The Thick-billed Shrike was again met with in the highlands of Mindoro. This bird appears to be scarce and difficult to obtain. The three Mindoro examples before me are rather more richly coloured than Luzon birds, the sides and flanks especially being deeper rust-colour ; but I do not attach any importance to these differences.

23. *ÆTHOPYGA FLAVIPECTUS*, Grant, *Ibis*, 1894, p. 513, & 1895, p. 111, pl. v. fig. 1.

Æthopyga minuta, Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. i. p. 18 (1894).

This beautiful little sulphur-breasted Sunbird was again found in the highlands of Mindoro, the female being obtained

for the first time. The readers of 'The Ibis' may remember that this species was discovered during Mr. Whitehead's expedition to the highlands of Benguet, N. Luzon, but only males were collected. In the figure given in 'The Ibis' for 1895, the breast and belly are of too pale a yellow. Messrs. Bourns and Worcester also obtained this bird in Mindoro, naming it *Æthopyga minuta*, but the only specimen they obtained, a male, was unfortunately stolen from their collection in July 1894. Brief as their description is, there can, however, be no doubt that *Æ. minuta* and *Æ. flavipectus* are identical, the latter name having priority by a couple of months. Messrs. Bourns and Worcester are also of this opinion (see *Ibis*, 1895, p. 405).

Adult female. Above olive-green, rather darker on the crown; feathers of the forehead with dark middles, a few indistinct red spots on some of the feathers of the mantle; rump bright yellow; chin and throat pale whitish yellow, becoming brighter on the breast, belly, and under tail-coverts; sides and flanks whitish yellow; quills blackish, the outer webs of the inner primaries and secondaries edged with olive, tinged with rufous; middle tail-feathers mostly olive-green; outer tail-feathers black, margined on the outer web and tipped with olive.

Total length 2·8 inches, culmen 0·6, wing 1·55, tail 0·9, tarsus 0·48.

24. *CINNYRIS SPERATA* (Linn.); Grant, *Ibis*, 1895, p. 254.

A single male of the Red-breasted Philippine Sunbird was obtained in the month of January by one of Mr. Whitehead's collectors in the lowlands. We shall be curious to learn whether *C. whiteheadi* will eventually be found to inhabit the highlands of Mindoro.

25. *CINNYRIS JUGULARIS* (Linn.); Grant, *Ibis*, 1895, p. 451.

Two males of the Yellow-breasted Philippine Sunbird were also among the birds sent from the lowlands.

26. *ZOSTEROPS AUREILORIS*, Grant, *Ibis*, 1895, p. 453.

A small series, including both sexes, of the Golden-fronted Silvereye were collected in the highlands. This species was

first obtained by Mr. Whitehead during his expedition to the highlands of Lepanto, N. Luzon, and the specimens from both islands are quite identical, both in colour and size. Some of the birds obtained in Mindoro are remarkably fine and perfect skins, showing the brilliant golden-yellow frontal band and patch in front of the eyes to great advantage, while the throat, breast, and underparts are brilliant yellow.

27. *PRIONOCHILUS INEXPECTATUS*, Hartert, Nov. Zool. ii. pp. 64, 486 (1895).

The Grey-breasted Thick-billed Flowerpecker was recently described from birds collected by Mr. A. H. Everett on Mindoro, and the same collector subsequently obtained specimens at Laguna de Bai, near Manilla. Mr. Whitehead now sends a male and several females from the former island.

28. *MOTACILLA MELANOPE*, Pall.; Grant, Ibis, 1895, p. 258.

29. *SARCOPS CALVUS* (Linn.); Grant, Ibis, 1894, p. 517, & 1895, pp. 258, 456.

The present collection contains one more example of the Bald-headed Grackle, and it is satisfactory to note that the Mindoro bird found west of longitude 122° is a perfect example of the grey-backed form; and I may here mention that a specimen recently received in a collection of birds from Negros is an equally typical example of the black-backed form. Mr. D. C. Worcester writes to me:—"Several points in your papers have aroused my interest especially, and I have intended to write to you regarding them, but have been so driven by other work as to have little time for such matters. For instance, I have had the specimens of *Sarcops calvus* collected by Steere, Bourns, Moseley, and myself, as well as those collected by the Menage Expedition, gone over with a view to verifying your ideas as to the two races, and will shortly send the results." I am waiting with interest to hear what conclusions Mr. Worcester arrives at; at present all the material examined bears out the theory of an eastern and western race already put forward (see Ibis, 1895, p. 258).

30. *CHLORURA BRUNNEIVENTRIS*, Grant, *Ibis*, 1894, p. 518, & 1895, p. 456.

This beautiful little green Finch was again procured from the highlands of Mindoro, and the present collection contains an adult female. As may be remembered, it was originally discovered by Mr. Whitehead in the highlands of Benguet, and subsequently met with by him in Lepanto. It appears to be a rare bird, for up to the present time he has obtained very few examples.

31. *PITTA ERYTHROGASTRA*, Temm.; Grant, *Ibis*, 1896, p. 121.

The Red-bellied Pitta, which appears to be universally distributed throughout the Philippine Islands, was again met with on Mindoro, and both sexes are represented.

32. *PELARGOPSIS GOULDI*, Sharpe, *Cat. B. Brit. Mus.* xvii. p. 100 (1892); Bourns & Worcester, *Occ. Pap. Minnesota Acad. Sci.* i. no. i. p. 33 (1894).

Pelargopsis leucocephala, Steere (nec Gmel.), *List Birds & Mamm. Philippines*, p. 9 (1890).

Gould's Stork-billed Kingfisher, so far as we at present know, is met with only on the islands of Mindoro, Calamianes, and Palawan. The type of this subspecies is labelled "Manilla, Gould Coll.," and it is quite possible that this locality may be perfectly correct, though the bird has not been met with in Luzon by any of the more recent collectors. The bird from Ilo-Ilo, Panay, collected during the voyage of H.M.S. 'Challenger,' is referred by Dr. Sharpe to his *P. gouldi*, but, with all due deference to the highest authority on Kingfishers, I think this identification is incorrect, for the Panay bird, in my opinion, undoubtedly belongs to the lighter form, *P. gigantea*, which is to be met with in Tablas, Sibuyan, Masbate, Samar, Leyte, Panay, Guimaras, Negros, Cebu, Dinagat, Mindanao, Malanipa, Basilan, Sulu, and Tawi Tawi.

Mr. Whitehead obtained several examples of both sexes of this handsome species of Kingfisher in the lowlands of

Mindoro; and in all, the head, neck, and underparts are rich ochre, only the chin and throat being slightly paler.

33. *ALCYONE CYANIPECTUS* (Lafres.); Grant, Ibis, 1894, p. 464.

A blue-belted specimen of this little Kingfisher was collected in the lowlands of Mindoro, and has been ascertained to be a male by Mr. Whitehead's collector; we have therefore, at present, no further proof that *A. cyanipectus* and *A. philippinensis* are opposite sexes of the same species, though I have now little doubt that this is the case.

34. *PENELOPIDES MINDORENSIS*, Steere; Grant, Cat. B. Brit. Mus. xvii. p. 374 (1892).

An adult male of the Mindoro Hornbill was obtained in November. This species is remarkable as having the sexes similar in plumage, whereas the females of all the other Philippine species differ conspicuously from the males and have the general colour of the plumage black.

35. *LYNGIPICUS VALIDIROSTRIS*, Blyth; BOURN & WORCESTER, Occ. Pap. Minnesota Acad. Sci. i. no. i. p. 52 (1894); Grant, Ibis, 1895, pp. 114, 262, 465.

An adult female of the Luzon Pigmy Woodpecker is sent. Having before me a particularly fine series of the Philippine species of this genus, including Prof. Steere's types, I think it may be useful to append a key showing briefly the chief differences by which the five Philippine species may be distinguished. The late Mr. Hargitt did not include two of Prof. Steere's species in his key to the genus *Lyngipicus* (cf. Cat. B. Brit. Mus. xviii. p. 309), and he united *I. validirostris* with *I. maculatus*, not having seen typical examples of the latter species.

I. Upper back, scapulars, and wing-coverts strongly barred with white.

A. Ear-coverts brown.

a. White eyebrow-stripes very wide; nape and ground-colour of back brownish black.

- a'*. Red patches on each side of the occiput
very small, widely separated from one
another by the nape *I. validirostris* ♂.
- b'*. No red patches *I. validirostris* ♀.
- b*. White eyebrow-stripes narrow and ill-defined;
nape and ground-colour of back olive-
brown.
- c'*. Large red patches on each side of the
occiput, nearly confluent on the nape .. *I. maculatus* ♂.
- d'*. No red patches *I. maculatus* ♀.
- B*. Ear-coverts black; pale buff eyebrow-stripes
very wide, extending down each side of the
neck.
- c*. Tail black barred with buff; underparts pale
buff, rather darker on the chest.
- e'*. A well-defined red patch on each side of
the occiput *I. leytenensis* ♂.
- f'*. No red patches *I. leytenensis* ♀.
- d*. Tail buff barred with black; underparts pale
saffron-yellow, inclining to orange or tawny
buff on the chest.
- g'*. A well-defined red patch on each side
of the occiput *I. fulvifasciatus* ♂.
- h'*. No red patch *I. fulvifasciatus* ♀.
- II*. Upper back, scapulars, and wing-coverts practi-
cally uniform, only a few white bars and marks
down the middle of the back.
- C*. Large red occipital patches, confluent on the
nape and forming a complete band; wide
white eyebrow-stripes; chest bright saffron-
yellow *I. ramsayi* ♂.
- D*. No red occipital patch; otherwise similar to
the male *I. ramsayi* ♀.

I. validirostris.—*Hab.* Luzon, Mindoro, and Marinduque.

I. maculatus.—*Hab.* Panay, Guimaras, Negros, and Cebu.

I. leytenensis.—*Hab.* Leyte and Samar.

I. fulvifasciatus (= *I. basilanica*, Steere; types compared).—*Hab.*
S. Mindanao and Basilan.

I. ramsayi.—*Hab.* Sulu and Tawi Tawi.

There is apparently a good deal of uncertainty as to the real locality in which the type specimens of *I. ramsayi* (said to have been collected by Mr. A. H. Everett) were obtained, and I think there can be no doubt that the district

“N.E. Borneo” given on the labels is a mistake. In the box containing the five specimens in the British Museum we find the following MS. note, in the handwriting of our friend Mr. A. H. Everett:—“I have examined the two skins of *I. ramsayi* (types) in the Museum, and am confident they were not collected by me or by any native hunters from whom I obtained birdskins. I have never had any skins from Sulu nor visited the islands myself. Possibly these birds were collected by my brother, H. H. Everett, at Tagoro, in Western Sarawak.” This note bears date the 25th of September, 1890, and since it was written Mr. A. H. Everett has visited the island of Bongao, in the Sulu archipelago, and there obtained examples of *I. ramsayi*, some of which are now before us.

36. *THRIPONAX MINDORENSIS*, Steere, List Birds & Mamm. Philippines, p. 8 (1890).

Mr. Whitehead's collection contains two adult pairs of the Mindoro Great Black Woodpecker, which were obtained in the lowlands. Messrs. Bourns and Worcester have usefully supplemented Prof. Steere's somewhat brief description of his *T. philippinensis* (= *T. hargitti*, Sharpe), from Panay, Guimaras, Masbate, and Palawan, and as the original description of *T. mindorensis*, which is a well-marked species, is even shorter than that of the above, a few additional notes may be of service:—At first sight these two white-rumped species appear to be nearly, if not quite, identical, but, as Prof. Steere very rightly says, the Mindoro bird is smaller and always has a considerable amount of white on the throat. There is, however, even a better character for distinguishing the two species, which he appears to have overlooked—*T. mindorensis* has both upper and lower mandibles entirely black, while in *T. hargitti* (as noted by Prof. Steere) the upper mandible is blackish and the lower horn-white, as in the black-rumped species, *T. javensis*. The white spots at the base of the first and second primaries appear to be a variable quantity, and may, or may not, be present. *T. mindorensis* is also stated to differ from *T. hargitti* in

having the "scarlet cheek-patch limited to a narrow bar upon the lower jaw." The difference in this respect between the two species is very slight.

		inches.
Types of <i>T. mindorensis</i>	♂, wing	7.5.
	♀, "	7.7 (slightly broken at tip).
Whitehead Collection	2 ♂, "	7.85.
	2 ♀, "	8.0.
Types of <i>T. philippinensis</i> (= <i>T. hargitti</i> , Sharpe). . . .	♂, "	8.15.
	♀, "	8.5.
Steere Collection	♂, "	8.0 (slightly broken at tip).

37. *XANTHOLÆMA HÆMATOCEPHALA* (P. L. S. Müller); Grant, Ibis, 1895, p. 466.

A male of the Crimson-gorgeted Barbet from the lowlands of Mindoro.

38. *CACOMANTIS MERULINUS* (Scop.); Grant, Ibis, 1895, p. 466.

An adult female of the Rufous-bellied Plantive Cuckoo was obtained in January in the lowlands.

39. *EUDYNAMIS MINDANENSIS* (Linn.); Grant, Ibis, 1895, p. 115.

An adult pair of the Philippine Koel were obtained by Mr. Whitehead in the lowlands. He calls attention to the extremely hooked upper mandibles of the two specimens sent, but this character is common to all members of this species.

40. *CENTROPUS JAVANICUS* (Dumont); Grant, Ibis, 1894, p. 520.

An immature female of this Crow-Pheasant was collected in the lowlands.

41. *CENTROPUS STEERII*, Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. i. p. 14 (1894).

Steere's Crow-Pheasant, a remarkable and extremely distinct species, was met with in the low-ground forests of Mindoro, examples of both sexes being obtained. It belongs to the dark-green group of the genus, which includes *C. mindorensis* (Steere) and the very closely allied, but somewhat

larger, *C. bernsteini*, Schlegel, from New Guinea. In both these species the general colour of the plumage above and below is black, glossed with very dark green, inclining to blue in the smaller (*C. mindorensis*). *C. steerii* has the general colour of both the upper and under parts brownish glossed with oily green, giving a general impression of very dark olive-colour, quite different from that of any other species of the genus known to me. While the wing is no longer than in *C. mindorensis*, the bill is nearly twice the size. On the other hand, *C. mindorensis* has the nail on the hind toe very long, nearly twice as long as in *C. steerii*.

42. *CENTROPUS MINDORENSIS* (Steere).

Centrococcyx mindorensis, Steere, List Birds & Mamm. Philippines, p. 12 (1890).

Two immature males of the small-billed Mindoro Crow-Pheasant were met with in the lower forests. The least mature of these, in mixed plumage, is worth noting. The immature feathers in the upper parts are dull brownish black, devoid of any gloss; the immature tail- and flight-feathers are similarly coloured, but slightly glossed, and the latter are indistinctly barred with pale rufous on both webs. The throat, breast, and belly are brownish black, indistinctly marked with buff; the rest of the plumage is similar to that of the adult.

43. *CACATUA URMATUROPYGIA* (L. S. Müller); Grant, Ibis, 1895, p. 263.

A fine male of the Philippine Cockatoo was collected in the lower forests.

44. *PRIONITURUS MINDORENSIS*, Steere, List Birds & Mamm. Philippines, p. 6 (1890).

The violet-blue head of the Mindoro Racquet-tailed Parrot makes it easily distinguishable from *P. discurus* and other allied forms.

45. *TANYGNATHUS LUCONENSIS* (L.); Grant, Ibis, 1894, p. 410.

The Blue-crowned Parrakcet appears to be universally

distributed throughout the islands, and seems to have been fairly common in the low forest of Mindoro, for the present collection contains splendid specimens of both sexes. Mr. Whitehead has only once before met with this species, on his first trip to Mt. Arajat, in Central Luzon.

46. *LORICULUS MINDORENSIS*, Steere, List Birds & Mamm. Philippines, p. 6 (1890) ; Salvad. Cat. Birds Brit. Mus. xx. p. 526 (1891).

I have compared a beautiful pair of the Mindoro Loricet with Prof. Steere's types and find them identical.

47. *PHABOTRERON LEUCOTIS* (Temm.) ; Grant, Ibis, 1895, p. 467.

The White-eared Brown Pigeon is found in Mindoro as well as in Luzon, and a female example was shot on the 26th of December.

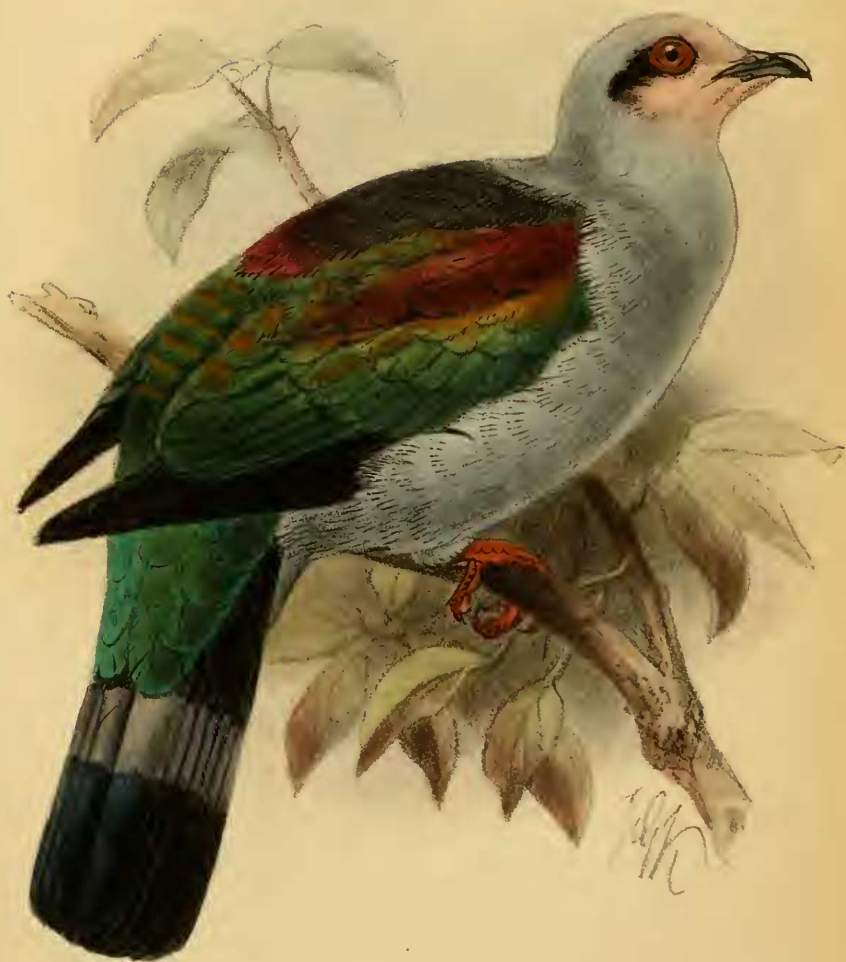
48. *CARPOPHAGA POLIOCEPHALA* (G. R. Gray) ; Grant, Ibis, 1895, p. 264.

A single male example of the Green-breasted Bar-tailed Fruit-Pigeon was shot in the highlands of Mount Dulangan ; it is the first time that this species has been recorded from Mindoro.

49. *CARPOPHAGA MINDORENSIS*. (Plate XI.)

Carpophaga mindorensis, Whitehead, Ann. & Mag. N. H. (6) xviii. p. 189 (1896).

This magnificent species of Fruit-Pigeon belongs to the group of *Carpophaga* characterized by having a wide grey band across the tail. The subdivision has been called *Zonophaps* [cf. Salvad. Cat. B. Brit. Mus. xxi. p. 207 (1893)], and though, of course, the great Mindoro Bar-tailed Fruit-Pigeon is allied to *C. poliocephala*, it is really most nearly related to *C. radiata* (Quoy & Gaimard) from Celebes and Sanghir ; in fact the latter may be regarded as a small representative form of the present species. In addition to the disparity in size, there are marked specific differences ; for instance, the vent and under tail-coverts are chestnut in the Celebean bird, whereas in the Mindoro giant they are



J G Keulemans del. et lith.

CARPOPHAGA MINDORENSIS.

Mintern Eros . imp.

grey, and the latter has a large greyish-black patch surrounding the eye and ear-coverts, which is wanting in the former. The species has been well characterized by Mr. Whitehead in the 'Annals and Magazine of Natural History,' and it is therefore unnecessary for me to give any further description, especially as the type is so well represented in Mr. Keulemans's fine drawing.

Mr. Whitehead says the eyes in this species have double rings of crimson-red, a character which is also found in *C. poliocephala*. He goes on to say, "It was only these splendid Pigeons that kept me at an elevation of nearly 5000 feet in the wet season in Mindoro. They were most difficult to obtain, and in nearly four months I only secured five specimens."

50. *CARPOPHAGA CHALYBURA*, Bonap.; Grant, Ibis, 1896, p. 124.

Mr. Whitehead again met with Bonaparte's Fruit-Pigeon, and a male is included in the present collection.

51. *MACROPYGIA TENUIROSTRIS*, Gray; Grant, Ibis, 1895, p. 469.

The Slender-billed Cuckoo-Dove was again found in the highlands and a male secured.

52. *CHALCOPHAPS INDICA* (Linn.); Grant, Ibis, 1895, p. 469.

The Indian Bronze-wing Dove, which is found all over the Philippine group, completes the list.

XLII.—*A few Notes on Birds of Egypt, from Observations made at Cairo in the months of January and February, 1896.* By E. CAVENDISH TAYLOR, M.A., F.Z.S.

I LEFT Marseilles for Alexandria by Messageries steamer on the 26th of December, 1895, and had good weather as far as the Straits of Messina. During this part of the voyage I saw a great number of Kittiwake Gulls (*Rissa tridactyla*), which used to fly close round the vessel, and were very tame,